DOCUMENT RESUME

ED 404 466 CE 073 399

TITLE Gender Bias: Recent Research and Interventions.
INSTITUTION Montclair State Univ., Upper Montclair, NJ. Career Equity Assistance Center for Research and Evaluation.
SPONS AGENCY New Jersey State Dept. of Education, Trenton. Office of Bilingual Education and Equity Issues.
PUB DATE 96
NOTE 6p.
PUB TYPE Reference Materials - Bibliographies (131) -- Collected Works - Serials (022)
JOURNAL CIT New Jersey Research Bulletin; n22 Spr 1996

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Annotated Bibliographies; Career Choice; Career Planning; Change Strategies; College Programs; Computer Science Education; Curriculum Development; Educational Needs; *Educational Practices; *Educational Research; Educational Technology; Elementary Secondary Education; Essays; Females; Higher Education; *Intervention; Research Reports; *Sex Bias; Teacher Education; Womens Education

ABSTRACT

This annotated bibliography lists 14 publications about recent research on gender bias and interventions to reduce gender bias in schools. The bibliography is divided into two sections: current research and intervention. The first includes descriptions of studies examining the following topics: gender bias in U.S. schools and its effects; identification of gender bias in teaching evaluations; relationship of imagery and visual literacy to gender bias; gender inequality in the workplace; role of computers in the classroom and workplace in perpetuating race, class, and gender inequities; gender bias in introductory computer science classes at two universities; differences between gender and other types of bias in schools; effects of gender bias on girls' development; and gender bias as it appears in curriculum materials in elementary and secondary schools. Included in the second section are the following publications: career/life planning curriculum for females in grades 5-12 and males in grades 5-8 that is designed to correct gender bias; teacher's guide introducing techniques for recognizing and eliminating bias in educational materials and instruction; description of a course in gender socialization for change agents; an article outlining promising practices fostering diversity; and a paper outlining a six-phase model for developing female-friendly science programs. Contact information for four sources of career equity assistance is listed. (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 404 466

GENDER BIAS:
RECENT RESEARCH AND INTERVENTIONS
RESEARCH BULLETIN NO. 22

CAREER EQUITY ASSISTANCE CENTER FOR RESEARCH AND EVALUATION
MONTCLAIR STATE UNIVERSITY

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J. Cole-Gravano

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

0207339

BEST COPY AVAILABLE

RESEARCH BULLETIN

NEW JERSEY CAREER EQUITY ASSISTANCE CENTER FOR RESEARCH AND EVALUATION

Spring, 1996 LIFE SKILLS CENTER, MONTCLAIR STATE UNIVERSITY Research Bulletin No. 22

Gender Bias: Recent Research and Interventions

Joan D. Bernstein, Ed.D.
Project Director
Joanne Coté-Bonanno, Ph.D.
Project Director
Jerry Carver, M.A.
Project Coordinator
Marjorie E. Doremus, Ph.D.
Project Coordinator
Melissa Fallon, Ed.M.
Project Coordinator
Maria T. Hey, B.S.W.
Graduate Assistant

The Office of Bilingual Education and Equity Issues, New Jersey Department of Education, through funding from the Carl D. Perkins Vocational and Applied Technology Education Act, P.L. 101-392, sex equity set aside sponsors a research library which is housed at and maintained by the Career Equity Assistance Center for Research and Evaluation at Montclair State University. The research library emphasizes materials on issues pertaining to gender equity and disseminates this recent research through a series of bulletins. Recent bulletins have highlighted research in the areas of sex role stereotyping and sexual harassment.

Publications summarized in this bulletin deal specifically with gender bias. Items have been divided into sections that focus on research or interventions to reduce bias.

Current Research

➧ Beck, I. (1995). Gender equity in the schools: Beyond sugar and spice. *PTA Today*, 20, 11-13.

Beck makes the case that gender bias exists in American schools, even though it may be unintentional on the part of those responsible. The article discusses the effects of this inequity and offers some solutions as to how gender bias can be fought and avoided.

➧ Boggs, Cathy. (1995, May). *Identifying gender bias in teaching evaluations: Insights offered by communication research.* Paper presented at the 45th Annual Meeting of the International Communication Association, Albuquerque, NM.

Communication research may provide some valuable information regarding evidence of gender bias affecting student ratings of their college professors' teaching effectiveness. In addition to an overview of general teaching evaluation processes and some thought on their validity, the paper discusses evidence that students' biases, including gender bias, may affect their evaluations of professors. Research is also presented and discussed regarding the influence of professors' and students' gender on classroom communication processes. Further research may provide insight into possible connections between communication patterns, gender and student ratings.

➧ Couch, R. A. (1995, October). Gender equity and visual literacy: Schools can help change perceptions. *Imagery and Visual Literacy: Selected Readings from the Annual Conference of the International Visual Literacy Association*. Tempe, AZ.

Based on the premise that many of the problems which face women are begun and perpetuated in schools, the author examines connections between gender equity and visual literacy in terms of: 1) the images of females and the exploitation of these images by the popular media and 2) the portrayal of female stereotypes in children's literature and textbooks. The author identifies five factors that contribute to negative images and stereotyping of females. Among the factors included were: 1) the existence of male bias in reading material and career preparation activities, 2) the use of male pronouns when no gender is indicated and other "masculinizations" of the English language, and 3) general sexism and the glorification of the male in literatures. The author provides his general and specific suggestions for eliminating gender bias in schools, such as making schools cooperative rather than competitive, avoiding the use of stereotyped images/visuals, increasing self-confidence, providing female role models and choosing appropriate literature and textbooks.

➧ Jacobs, Jerry A. (Ed.). (1995). *Gender Inequality at Work*. Thousand Oaks, CA: Sage Publications.

This book is a compilation of papers regarding the dynamics of gender inequality in the workplace. Included are analyses of empirical studies and historical reports exploring the influences of personal, family and structural factors on gender in the workplace. An introduction covers topics such as sex segregation and the economic and sociological approaches to gender equity. The book further covers a wide variety of aspects of gender inequality such as the undervaluation of women's work, the gender gap in authority, trends in occupational opportunities for women, ideas about occupational feminization and an assessment of progress in eradicating gender bias in the workplace.

➧ Mangione, Melissa. (1995). Understanding the critics of educational technology: Gender inequalities and computers 1983-1993. *Proceedings of the 1995 Annual National Convention of the Association for Educational Communications and Technology (AECT)*, Anaheim, CA.

This paper examines the role of computers in the classroom and workplace in perpetuating inequities due to race, class and gender. The examination of certain educational software packages reveals partiality in their design as well as the presence of gender stereotypes in the text. Male bias in computer software, according to some theories, is the result of inequity in computer access and in educational experiences in math and science. Regardless of gender or socioeconomic level, all students must have equal opportunity to learn about and use computers.

➧ Sackrowitz, Marian. (1995). An unlevel playing field: Women in the introductory computer science courses. *Issues of Education at Community Colleges: Essays by Fellows in the Mid-Career Fellowship Program at Princeton University*, Princeton, NJ.

Reports from the Department of Education have indicated that there has been a decline in recent years in the number of females earning degrees in computer science. This data prompted the Sackrowitz study, an effort to determine whether gender bias exists in introductory computer science classes. Students in introductory computer science classes at Rutgers and Princeton Universities were given questionnaires. Among other findings, the responses indicated that more men than the women agreed that they could program fluently, that more men were

more likely to indicate a desire to continue in the field, and that men demonstrated a more positive attitude toward a career in computer science than women did. The researchers concluded, based on the questionnaire results, that there seems to be a positive feedback loop for men and a negative one for women in computer science classes. The authors provide several suggestions to educators to help correct this problem.

➧ Cardenas, Jose A. (1994). A comprehensive approach to gender equity. *IDRA Newsletter*, 21, 3-4.

Compares gender bias in schools to other types of bias, e.g. racial. Divides inequitable treatment of females into three categories: gender bias in the classroom, exclusion of females from traditionally male activities and sexual harassment. Minority women and girls are the recipients of several forms of bias including the economic, racial, and gender level. The author argues that there is a need for a new educational paradigm that incorporates equitable treatment. Three important characteristics of such a program are: the valuing of all students, provision of support services, and the development of new interrelationships among home, school and community. The author makes suggestions for creating equitable education and support services by drawing from ten successful programs for minority and disadvantaged populations.

➧ Sadker, Myra and Sadker, David. (1994). *Failing at fairness: How America's schools cheat girls*. New York: MacMillan.

This book explores the effects of gender bias on girls throughout their development and into adulthood. Based on twenty years of research on sexism in America, the authors conclude that, overall, girls and boys receive very different educations despite the often well-meaning intentions of their educators. Gender bias manifests itself in the educational system through the reinforcement of social role behaviors. Girls are positively reinforced for speaking quietly, deferring to boys, valuing neatness over innovation and appearance over intelligence, avoiding math and science and accepting fewer opportunities than those offered to boys.

These differences have a profound and long-term effect. In the early grades girls generally outperform boys academically, but by the time they reach high school the tables have turned and they lag behind. Sadker and Sadker describe the behaviors of adults which propagate gender bias and offer suggestions on how schools can better serve children.

➧ Love, Reeve (1993). Gender bias: Inequities in the classroom. *IDRA Newsletter*, 20,11-12.

Gender bias refers to a pattern of behaviors that would be judged inconsequential if considered separately. However, these behaviors work together to reinforce gender role stereotypes and therefore also perpetuate the limits that accompany those stereotypes. Gender bias is discussed as it appears in curriculum materials for elementary and secondary schools. Research is presented on how bias becomes institutionalized through curriculum materials. Specific examples are presented to illustrate how to recognize sex bias in texts.

Interventions

➧ Bartholomew, C. (1995). Horizons: 2000. Career and life planning curriculum for grades 5 to 12. *Intervention in School and Clinic*, 31, 52-57.

Information is presented on a career and life planning curriculum for females in grades 5-12 and males in grades 5-8. The curriculum is designed to correct gender bias in education by meeting the needs of today's female students.

➧ Bebermeyer, J. and Edmond, M. (Eds.). (1995). *Reflecting equity and diversity*. Grand Rapids, Michigan: Reflections Unlimited.

This guide for educators introduces techniques for recognizing

and eliminating bias in educational materials and instruction. The three sections are: guidelines and procedure for evaluating bias in instructional materials; bias awareness training worksheets; and a bias awareness and procedural training course. Bias is defined and its impact on students is discussed. Multiple examples are provided to assist readers in practical application of the materials. An extensive bibliography is provided that focuses on different types of bias including gender bias.

➧ Eckart, J. and Tracy, D. M. (1992). Gender socialization in schools: A course for change agents. *Teacher Education*, 5, 59-64.

Authors trace the creation and initial teaching of a course designed to teach educators about gender socialization in schools. The class is designed to assist educators and parents in creating educational programs that reduce gender bias through providing an understanding of the role that gender plays in teaching and learning.

➧ Piland, W. E., et. al. (1995). Promising practices. *Multi-cultural Education*, 2, 17-22.

A variety of programs designed to reduce gender, racial and class bias by fostering a greater understanding of diverse cultures are examined. Among the programs examined are a doctoral program in multicultural education and a staff development program for dealing with workplace diversity. Guidelines for eliminating bias in the classroom are also suggested.

➧ Rosser, Sue V. (1993). Female friendly science: Including women in curricular content and pedagogy in science. *The Journal of General Education*, 42, 191-220.

Improving science through increased diversity may be possible through the transformation of curriculum and pedagogy in the sciences to include women and people of color. This paper provides a six phase model explaining the steps necessary to analyze the current situation and to transform a science curriculum from exclusion to inclusion with respect to women and people of color. In Phase I, students and faculty are unaware of the absence of women scientists in theoretical and decision-making positions. Phase II occurs when there is recognition that most scientists are male. In Phase III, examination of barriers that have prevented women from becoming scientists begins to occur. Phase IV constitutes an active search for women scientists, while Phase V focuses on the work that has been done by women scientists. By Phase VI the curriculum is transformed to include the new knowledge. As a result, more students of diverse backgrounds will be attracted to the sciences. The scientific community, therefore, will gain new perspectives and become better equipped to confront our increasingly complex society.

CAREER EQUITY ASSISTANCE

Patria A. Mitchell, Ph.D.
Equity Coordinator
Office of Bilingual Education and Equity Issues
CN500
Trenton, NJ 08625-0500
(609) 292-659
email: pmitchell@aol.com

Training
The College of New Jersey
Hillwood Lakes
CN 4700,
Trenton, NJ 08650
(609) 771-2816
email: ceact@tcnj.edu

Research and Evaluation
Montclair State University
Life Skills Center
Upper Montclair, NJ 07043
(201) 655-7783
email:
wojtowiczg@saturn.montclair.edu

Marketing and Resources
Middlesex County Vocational and Technical Schools
618 New Brunswick Ave.
Perth Amboy, NJ 08861
(908) 293-0510
email: dlystad@evertech.net